



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR**  
(Established by Govt. of A.P., Act. No. 30 of 2008)  
ANANTHAPURAMU – 515 002 (A.P) INDIA

*Course Structure & Syllabus for B.Tech. (Regular)*  
*R13 Regulations*

**COMPUTER SCIENCE & ENGINEERING**

**B.Tech. I Year**

S.No	Course code	Subject	Th	Tu/	Lab.	Credits
1.	13A52101	Communicative English	2	-	-	3
2.	13A56101	Engineering Physics	2	-	-	3
3.	13A51101	Engineering Chemistry	2	-	-	3
4.	13A54101	Mathematics - I	3	1	-	5
5.	13A05101	Problem Solving & Computer Programming	3	1	-	5
6.	13A54102	Mathematics - II	3	1	-	5
7.	13A99101	Basic Electrical & Electronics Engineering	3	1	-	5
8.	13A05102	Computer Programming Lab	-	-	3	4
9.	13A99102	Engineering Physics & Engineering Chemistry Lab *	-	-	3	4
10.	13A99103	Engineering & IT Workshop #	-	-	3	4
11.	13A52102	English Language Comm. Skills Lab	-	-	3	4
Total Credits						45

Th = Theory; Tu = Tutorial & Lab = Laboratory:

\* The students shall attend the Physics lab and Chemistry lab in alternate weeks. The end exam shall be conducted separately and average of the two exams shall be recorded by the University exam section.

# The students shall attend Engineering and IT work shop as a single lab every week and the end exam is conducted as a single lab. Sharing the Maximum marks and time for one task each from Engineering workshop and IT workshop. The sum of the marks awarded shall be recorded.

**B.Tech. II - I Semester**

S.No	Course code	Subject	Th	Tu /Drg /Lab	Credits
1.	13A03304	Engineering Graphics	1	- 3 -	3
2.	13A54303	Probability and Statistics	3	1 - -	3
3.	13A01403	Environmental Science		1 - -	3
4.	13A05301	Data Structures	3	1 - -	3
5.	13A04306	Digital Logic Design	3	1 - -	3
6.	13A05302	Discrete Mathematics	3	1 - -	3
7.	13A99304	Electrical & Electronics Engineering Lab	-	- - 3	2
8.	13A05303	Data Structures Lab	-	- - 3	2
Total Credits					22

**B.Tech. II - II Semester**

S.No	Course code	Subject	Theory	Tu / Lab	Credits
1.	13A05401	Computer Organization & Architecture	3	1 -	3
2.	13A05402	Database Management Systems	3	1 -	3
3.	13A05403	Java Programming	3	1 -	3
4.	13A05404	Formal Languages & Automata Theory	3	1 -	3
5.	13A05405	Principles of Programming Languages	3	1 -	3
6.	13A05406	Design And Analysis of Algorithms	3	1 -	3
7.	13A05407	Database Management Systems Lab	-	- 3	2
8.	13A05408	Java Programming Lab	-	- 3	2
9.	13A52301	Human Values & Professional Ethics (Audit Course)	2	- -	-
Total Credits					22

**B.Tech. III - I Semester**

S.No	Course code	Subject	Theory	Tu / Lab	Credits
1.	13A05501	Operating Systems	3	1 -	3
2.	13A05502	Compiler Design	3	1 -	3
3.	13A05503	Unix and Shell Programming	3	1 -	3
4.	13A05504	Software Engineering	3	1 -	3
5.	13A04507	Micro Processors & Interfacing	3	1 -	3
6.	13A52501	Managerial Economics and Financial Analysis	3	1 -	3
7.	13A05505	Operating Systems Lab	-	- 3	2
8.	13A05506	Compiler Design and Assembly Language Programming Lab	-	- 3	2
9.	13A52502	Advanced English language Comm. Skills Lab (Audit Course)	-	- 3	
Total Credits					22



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR**  
(Established by Govt. of A.P., Act. No. 30 of 2008)  
ANANTHAPURAMU – 515 002 (A.P) INDIA

*Revised Course Structure for B.Tech.- R13 Regulations*

**COMPUTER SCIENCE & ENGINEERING**

**III - II Semester**

S.No	Course code	Subject	Theory	Tu / Lab	Credits
1.	13A05601	Computer Networks	3	1 -	3
2.	13A05602	Object Oriented Analysis, Design & Modeling	3	1 -	3
3.	13A05603	Data Mining	3	1 -	3
4.	13A05604	Web Technologies	3	1 -	3
5.	13A05605	Software Testing Methodologies	3	1 -	3
		<b>Choice Based Credit Courses</b>	3	1 -	3
6.	13A05606 13A05607 13A05608	1. Big Data Technologies 2. Cloud Computing 3. Linux Administration & Programming			
7.	13A05609	Unified Modeling Language and Testing Lab	-	- 3	2
8.	13A05610	Web Technologies & Data Mining Lab	-	- 3	2
9.	13A05611	Comprehensive Online Examination-II	-	- -	1
		Total	18	6 9	23

  
**DIRECTOR**  
Academic & Planning  
JNT University Anantapur,  
Ananthapuramu-515 002.



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR**

**Course Structure for Computer Science and Engineering  
B. Tech Course  
(2013-14)**

**IV - I Semester**

S.No	Course code	Subject	Theory	T	P	Credits
1.	13A05701	Software Architecture & Design Patterns	3	1	-	3
2.	13A05702	Cryptography & Network Security	3	1	-	3
3.	13A05703	Mobile Application Development	3	1	-	3
4.	13A52702	Management Science	3	1	-	3
5.	13A05704 13A05705 13A05706	<b>Choice Based Credit Courses</b> ( Department specific) 1. Human Computer Interaction 2. Computer Graphics & Multimedia 3. Soft Computing	3	1	-	3
6.	13A05707 13A05708 13A05709	<b>Choice Based Credit Courses</b> ( Department specific) 1. Artificial Intelligence 2. Information Retrieval Systems 3. Advanced Computer Architecture	3	1	-	3
7.	13A05710	Computer Networks and Network Security Laboratory	-		4	2
8.	13A05711	Mobile Application Development Laboratory	-		4	2
<b>Total</b>			<b>18</b>	<b>06</b>	<b>08</b>	<b>22</b>



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

### Course Structure for Computer Science and Engineering B. Tech Course (2013-14)

#### IV - II Semester

S.No	Course code	Subject	Theory	Tu	Lab	Credits
1.	13A05801 13A05802	MOOC 1 1. Mobile Computing 2. Natural Language Processing	3	1	-	3
2.	13A05803 13A05804	MOOC 2 1. Parallel Algorithms 2. Real Time Systems	3	1	-	3
3.	13A05805 13A05806	MOOC 3 1. High Performance Computing 2. Python Programming	3	1	-	3
4.	13A05807	Technical Seminar	-	-	4	2
5.	13A05808	Project work	-	-	24	12
Total			<b>09</b>	<b>03</b>	<b>28</b>	<b>23</b>

**3 Theory + 1 Technical Seminar + 1 Project work**

**\*Either by MOOCS manner or Self study or Conventional manner**